MODIS sensor Working Group (MsWG) Meeting Summary Feb. 18, 2009

Attendance: Gary Toller, Bill Barnes, Aisheng Wu, Junqiang Sun, Gerhard Meister, Ben Ripman, Hongda Chen, Chris Moeller, Brian Wenny, Jack Xiong, Kurt Thome, James Kuyper

Scheduled Agenda

Item 1: Recent L1B LUT delivery

- Terra forward update – 5.0.40.17 (02/19/09) – m1, RVS
- Collection 6 - Aqua re-delivery: 6.1.1.1 (02/11/09)
  - Terra re-delivery: 6.1.0.1 (02/13/09)
  - Terra alternative approach for Ocean group tests: 6.1.0.1_ALT

Item 2: Instrument status

- Terra and Aqua MODIS are in nominal operations.
- Terra Drag Make-up Maneuver (DMU #55) scheduled for 2009/057 (Feb 26) ~ 17:39. Loss of pointing accuracy expected from ~17:39 – 20:00

Item 3: MCST recent activities

- Reprocessing of v6 RSB algorithms. Junqiang presented a detailed package summarizing the algorithms used in v6 LUT delivery and providing comparison results between v5 and v6. The majority of changes made in v6 have been presented in past MsWG or Science Team meetings. New changes made recently to v6 algorithms come from the additional correction for the degradation of SDSM detector 9. The impacts are minimal at the beginning of mission and reach 1.2% for Terra and 0.2% for Aqua at present.
- The re-processed alternative RVS approach for v6 RSB LUT for Ocean Group testing was delivered to L1B.
- As a follow-up to Chris's Aqua AIRS-MODIS radiometric comparison and possible Band 33-36 out-of-band contribution discussed at the last MsWG. Aisheng provided a Raytheon document released in early 1999 on FM1 OOB spectral measurements. This document lists prelaunch test results as the ratio of the integrated OOB spectral response to integrated bandpass spectral response. For the bands of interest the OOB response was <2.5%. MCST will send a copy of the document to Chris.

Item 4: Around the Table

- Gerhard requested information on MODIS SRCA trending results and their possible impact on RVS after Junqiang presented a package on the updated RSB v6 algorithms and their impacts in comparison with v5. MCST will provide the SRCA trending results to him after the meeting. He also suggested that for Aqua v6 detector-dependent RVS, which is set to be time-dependent, a one-time adjustment for detector-to-detector differences should be good enough since Aqua detector-to-detector differences are small and maintained to be stable. Gerhard will conduct some tests on validation of v6 LUTs based on ocean color products.
- Jack suggested that the impacts of fluctuations of Aqua cold focal plane temperatures on the TEB calibration should be discussed in the next MsWG meeting. Results of the same issue have been presented to the meeting previously. However, a further assessment is necessary to help making a decision if there is a need to set the temperature control point for Aqua cold focal plane from 83K to 85K.

Next Meeting: ~March 4, 2009

Compiled by A. Wu